

IN THE DISTRICT COURT OF THE VIRGIN ISLANDS
DIVISION OF ST. CROIX

JOSEPHAT HENRY, et al. : CIVIL ACTION
: :
v. : :
: :
ST. CROIX ALUMINA, LLC, et al. : NO. 1999-0036

MEMORANDUM

Bartle, C.J.

August 28, 2009

Now before the court is the motion of defendants St. Croix Alumina, LLC ("SCA") and Alcoa, Inc. ("Alcoa") and Glencore Ltd. ("Glencore") for summary judgment on all of plaintiffs' non-class claims seeking compensatory and punitive damages.¹

The instant lawsuit was filed as a putative class action in February, 1999. The Third Amended Complaint (the "Complaint") alleges that as a result of Hurricane Georges, plaintiffs, who were then residents of St. Croix, suffered personal injuries and property damage due to exposure to hazardous materials stored on St. Croix by defendants SCA and Alcoa and transported there by defendant Glencore. Their claims against defendants include maintaining an abnormally dangerous condition, nuisance per se, public and private nuisance,

1. Defendants' motions for summary judgment on plaintiffs' class claim for injunctive relief for the "cleanup, abatement or removal of the substances currently present on the refinery property," are separately pending. See Henry v. St. Croix Alumina, LLC, Civ. A. No. 1999-0036, Mem. June 3, 2008, at 25. We will address those motions at a later date.

negligent abatement, intentional and negligent infliction of emotional distress, negligence, and punitive damages.

This court initially certified a class under Rule 23(b) (3) of the Federal Rules of Civil Procedure. Henry v. St. Croix Alumina, LLC, Civ. A. No. 1999-0036, Mem. Aug. 7, 2000. We later decertified that class and certified a new class seeking only injunctive relief related to an ongoing public nuisance under Rule 23(b) (2). Id., Mem. June 3, 2008.

We recently granted the motions of defendants to exclude the four expert witnesses offered by plaintiffs to establish the cause of their alleged personal injuries. Id., Mem. Apr. 13, 2009.

I.

Summary judgment is appropriate "if the pleadings, the discovery and disclosure materials on file, and any affidavits show that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(c); see also Celotex Corp. v. Catrett, 477 U.S. 317, 323 (1986). A dispute is genuine if the evidence is such that a reasonable jury could return a verdict for the non-moving party. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 254 (1986). After reviewing the evidence, the court makes all reasonable inferences from the evidence in the light most favorable to the non-movant. In re Flat Glass Antitrust Litig., 385 F.3d 350, 357 (3d Cir. 2004).

II.

The following facts are either undisputed or viewed in the light most favorable to plaintiffs. Plaintiffs are current and former residents of St. Croix in the United States Virgin Islands who lived in the vicinity of the St. Croix Alumina Refinery Plant (the "Refinery") when Hurricane Georges struck the Virgin Islands on September 21, 1998. Defendant Glencore, a Swiss company, was the ultimate parent of Virgin Islands Aluminum Company ("Vialco"), which acquired the Refinery in 1989. In 1995, after a series of complex corporate restructurings involving Vialco, ownership of the Refinery was transferred to defendant SCA, a subsidiary of defendant Alcoa.² The Refinery is currently owned by St. Croix Renaissance Group, LLC, a non-party, and has not been in operation since 2002 at the latest.

For over thirty years, the single primary function of the Refinery has been the extraction of commercially valuable alumina from bauxite, a reddish ore having the consistency of dirt or dust. Bauxite was supplied to Vialco and SCA, as Refinery owners, by Glencore. Using what is known as the "Bayer process," Refinery employees obtained alumina by combining the bauxite with caustic soda, a strong, corrosive base also known as sodium hydroxide or lye. An undesirable but necessary byproduct of the Bayer process is a substance known as "bauxite residue,"

2. The refinery ceased operations in January, 2001. The following year, SCA sold the refinery to St. Croix Renaissance Group, LLP, which is not a party to this lawsuit.

also called "red mud." It is indistinguishable in color from bauxite but otherwise has different physical and chemical properties.

One component of red mud is the aforementioned caustic soda, a highly alkaline substance that, undiluted, poses a serious health hazard due to its extremely high pH. Because the caustic soda is expensive, however, refinery employees operated filter presses to remove some amount of it from the red mud and make it available for reuse. The pH of any given batch of red mud therefore varies with the amount of caustic soda remaining in it. Refinery employees further reduced the pH of the red mud by combining it with fly ash and seawater before storing it.

"Material Safety Data Sheets" obtained from defendants state that exposure to the red mud stored at the Refinery may have carried health risks, including skin, eye, and respiratory irritation. Other data sheets informed Refinery employees that contact with bauxite could cause mild skin irritation.

During the relevant time frame in 1998, nearly ten thousand metric tons of bauxite awaited processing on the Refinery premises in a single large, A-frame structure roofed with steel paneling. An even larger amount of red mud was "dry-stacked" in seven enormous, uncovered "cells" around the Refinery. SCA, Alcoa, and Glencore were all aware at that time that hurricanes, which St. Croix often experienced, created the risk of "fugitive emissions" from the bauxite storage shed and

red mud piles. The extent and frequency of those emissions is hotly disputed and not subject to simple verification.

As noted above, Hurricane Georges struck the island of St. Croix on September 21, 1998. Existing meteorologic data to some extent charts the direction, intensity, and duration of the storm's winds and rains. At some point during the hurricane, strong winds ripped portions of the steel roof from the bauxite shed. Witnesses on the Refinery premises saw large amounts of bauxite being blown into the air.

In the days following the storm, the Virgin Islands Department of Environmental Planning ("DEP"), now the Department of Planning and Natural Resources, received numerous reports from residents of neighborhoods adjacent to the Refinery that the storm had deposited tremendous quantities of a substance described as "red mud" onto their properties and into their cisterns which are the primary source of potable water for many residents of St. Croix. DEP staff investigated residences and found "entire homes including porches and driveways discolored by a pink to reddish substance." The only direct evidence concerning the chemical nature of that material, however, comes from post-hurricane testing conducted by the DEP and the Environmental Protection Agency ("EPA"). Those agencies collected samples from thirty-three allegedly affected cisterns, including two belonging to plaintiffs. They concluded that "the red dust [deposited in the neighborhoods surrounding the Refinery] is in fact bauxite."

Plaintiffs have submitted affidavits stating that they received significant exposure to the reddish material in the days, weeks, and months following the storm. They describe considerable property damage including but not limited to contamination of their cisterns, loss of personal goods such as clothing and bedding, and discoloration of interior and exterior household surfaces. The evidence of property damage consists solely of what is contained in those affidavits.

Plaintiffs also complained of a broad array of respiratory and dermatological maladies that arose during and in the aftermath of the hurricane. Only a small number of plaintiffs ever sought professional medical treatment for their symptoms, which disappeared almost entirely in the months following the hurricane. The overwhelming majority of personal injuries are uncorroborated by any medical documentation or testimony from treating physicians. As noted above, we have previously determined that the proffered testimony of the plaintiffs' four experts on the issue of causation of plaintiffs' alleged personal injuries does not meet the reliability test of Rule 702 of the Federal Rules of Civil Procedure or Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579 (1993). Henry, Mem. Apr. 13, 2009.

Many plaintiffs state that representatives of defendants admitted shortly after the hurricane, both in person and publicly over the radio, that "the red dust and red water that was all over [the] neighborhoods came from the red mud

pile." SCA voluntarily paid for the reddish material to be removed from certain affected homes and cisterns, including those of some plaintiffs. A number of plaintiffs also state that their property was further damaged by the cleaning crews, who were unable to remove the entirety of the red dust from the afflicted properties.

III.

Count I of the Complaint alleges that defendants engaged in an abnormally dangerous activity by storing industrial quantities of bauxite and red mud near residential neighborhoods on a hurricane-prone island. The Virgin Islands has adopted the Restatement (Second) of Torts, which imposes strict liability, that is, liability without regard to fault, for "the kind of harm, the possibility of which makes the activity abnormally dangerous." See Restatement (Second) of Torts § 519; In re Tutu Wells Contamination Litig., 846 F. Supp. 1243, 1268 (D.V.I. 1993). Whether a given enterprise constitutes an abnormally dangerous activity is a question of law for the court to resolve. See In re Tutu Wells, 846 F. Supp. at 1268; Restatement (Second) of Torts § 520, cmt. 1. The court must consider six factors, which include:

- (a) the existence of high degree of risk of some harm to the person, land or chattels of others;
- (b) the likelihood that the harm that results from it will be great;
- (c) the inability to eliminate the risk by the exercise of reasonable care;
- (d) the extent to which the activity is not a matter of common usage;

(e) the inappropriateness of the activity to the place where it is carried on; and
(f) the extent to which its value to the community is outweighed by its dangerous attributes.

Restatement (Second) of Torts § 520. No one factor is dispositive. See id., cmt. f.

No precedent exists under Virgin Islands law as to whether the imposition of strict liability is warranted on these facts. We thus are left to predict the outcome which the Supreme Court of the Virgin Islands would adopt if presented with the same record. Burgh v. Borough Council of Borough of Montrose, 251 F.3d 465, 474 (3d Cir. 2001).

The first factor listed in § 520 is whether a high degree of risk of some harm to the person, land, or chattels of another exists in connection with defendants' activities. Defendants contend that the storage of bauxite and red mud poses no threat of any kind to nearby residents or their real and personal property. As plaintiffs note in response, the operative factor here is St. Croix's history of powerful hurricanes, some bringing winds of over 100 miles per hour, as Hurricane Georges did. Corporate documents and deposition testimony show that the risk of fugitive emissions from the Refinery premises under hurricane conditions was sufficient to warrant expensive mitigation efforts by SCA and Alcoa. Moreover, defendants' assertions as to the lack of risk are belied by ample evidence that fugitive emissions have been a problem at the Refinery since well before Hurricane Georges. Under these circumstances, we

find that the storage of bauxite and red mud carried a high degree of risk of some harm at least to the property of the neighboring plaintiffs.

The second factor, that is, the likelihood that the harm will be great, is also met here. The quantity of bauxite and red mud stored, their propensity for particulate dispersion when exposed to wind, and the number of residences within a short distance of the Refinery property combined to create the possibility of widespread damage to real and personal property. There is no question that liability for engaging in an abnormally dangerous activity has routinely been extended to the storage of industrial byproducts. See, e.g., Daigle v. Shell Oil Co., 972 F.2d 1527, 1544 (10th Cir. 1992); Schwartzman, Inc. v. Atchison, Topeka & Santa Fe Railway Co., 842 F. Supp. 475, 478-79 (D.N.M. 1993). Indeed, this court itself has held that the storage of gasoline in underground tanks below a service station but above a large aquifer on St. Thomas constituted an abnormally dangerous activity. See In re Tutu Wells, 846 F. Supp. at 1269.

Defendants argue that because plaintiffs' expert testimony as to causation of personal injury or toxic contamination has been excluded, plaintiffs cannot prove a likelihood of "great" harm. We disagree. Even if we credit defendants' assertion that the chemicals to which plaintiffs were exposed were relatively benign, we are not precluded from finding that storage of those materials under the circumstances at issue constituted an abnormally dangerous activity. For instance, the

Court of Appeals for the Eighth Circuit has held that the use of a dam to restrain water, which obviously numbers among the substances most necessary to sustain human life, can be ultrahazardous under certain conditions. Henderson v. United States, 965 F.2d 1488, 1495-97 (8th Cir. 1992). The substances implicated here, like water, can cause enormous property damage if released in the wrong environment and in sufficient quantities. Consequently, we conclude that the second factor also warrants the imposition of strict liability.

The third factor is whether fugitive emissions from the Refinery's storage areas can be prevented through the exercise of reasonable care. SCA and Alcoa maintain that they took reasonable precautions to prevent fugitive emissions at all times with respect to the bauxite shed and red mud piles. It is undisputed, however, that hurricane-strength winds tore holes in the steel roof of the bauxite shed during Hurricane Georges, allowing a large quantity of bauxite to escape. In 1995, Hurricane Marilyn also blew portions of roofing from the Refinery's bauxite shed. Moreover, numerous interactions between the DPNR and the Refinery's current and former owners demonstrate that fugitive emissions have long been a problem. We conclude that fugitive emissions from the bauxite and red mud piles would be difficult if not impossible to prevent entirely even with the exercise of reasonable care.

With respect to the fourth factor, it is beyond cavil that storage of mass quantities of bauxite and red mud is not a

"matter of common usage." As to the fifth factor, SCA and Alcoa emphasize that the Refinery was located on a plot that abutted other industrial facilities, including a large oil refinery and a commercial airport. This, although true, does not eliminate the fact that the Refinery also sat in close proximity to thousands of residential dwellings. Finally, although the operation of the Refinery may have provided considerable benefits to the St. Croix economy over a lengthy period of time, such benefits clearly do not outweigh the environmental risks associated with its presence.

In our view, the Supreme Court of the Virgin Islands would conclude that the storage of massive quantities of bauxite and red mud subject to particulate dispersion less than a mile away from residential neighborhoods on St. Croix in a hurricane zone constituted an abnormally dangerous activity.

To succeed on Count I at trial, therefore, plaintiffs need not prove that defendants owed them a duty or that any duty was breached. All they must establish are causation and damages. See, e.g. City of Bloomington, Ind. v. Westinghouse Elec. Corp., 891 F.2d 611, 615 (7th Cir. 1989). Proof of causation of personal injuries in the context of toxic torts generally, and in this case in particular, requires expert testimony. See, e.g., Heller v. Shaw Indus., Inc., 167 F.3d 146, 165 (3d Cir. 1999); Satterfield v. J.M. Huber Corp., 888 F. Supp. 1567, 1570-71 (N.D. Ga. 1995). With the rejection of the proffered opinions of plaintiffs' four experts as to the causation of plaintiffs'

alleged personal injuries as insufficiently reliable under the standards of Rule 702 and Daubert, any other evidence in the record is simply insufficient as a matter of law to sustain the claims of any plaintiff for personal injuries. As a consequence, plaintiffs have failed to raise a genuine question of material fact as to whether their alleged personal injuries were caused by exposure to bauxite or red mud, or whether those injuries are attributable to some other cause. See, e.g., Heller, 167 F.3d at 165; Henry, Mem. Apr. 13, 2009. We will grant summary judgment in favor of defendants on Count I insofar as plaintiffs seek recovery for personal injuries.

Several plaintiffs seek to hold defendants strictly liable on Count I for damage to their real and personal property. Defendants again challenge plaintiffs' ability to establish causation in the absence of expert testimony.³ They contend that plaintiffs have submitted no evidence that the material deposited on their properties originated from the Alumina Refinery as opposed to other nearby industrial facilities. See, e.g., Satterfield v. J.M. Huber Corp., 888 F. Supp. 1567, 1572-73 (N.D. Ga. 1995).

The record confirms that during Hurricane Georges, the exteriors of many plaintiffs' residences were stained a reddish

3. Plaintiffs initially attempted to establish a neighborhood-wide diminution in property value through the expert testimony of Dr. John Kilpatrick. After defendants filed a motion to exclude his testimony, plaintiffs voluntarily withdrew Dr. Kilpatrick as an expert.

color consistent with that of bauxite and red mud. Testing conducted by the DPNR confirmed that the reddish substance deposited in residential cisterns in the hurricane's aftermath was in fact bauxite. Plaintiffs have attested by affidavit that Refinery employees admitted that the reddish material found on plaintiffs' properties originated at the Refinery. Moreover, unlike in Satterfield, the case cited by defendants, no evidence exists that fugitive emissions from other nearby industrial facilities could have caused similar damage. Consequently, plaintiffs have produced sufficient evidence to raise a genuine issue of material fact regarding the elements of causation and damages for their property claims even in the absence of expert testimony.⁴ We will deny the motion of defendants for summary judgment on Count I of the Complaint to the extent that the named plaintiffs make claims for property damage.⁵

4. This is not inconsistent with our earlier conclusion that expert testimony was necessary to establish causation in the context of personal injury claims. The determination of whether the release of red particulates from one property caused the red staining of a nearby residence is well within the purview of a jury. Whether that now-dissipated dust was toxic in the unknown state in which it reached the residences and whether it in fact caused a diverse array of uncorroborated physical ailments, in the absence of expert testimony, is not.

5. This court has already concluded that a genuine question of material fact exists as to whether Glencore, although not an owner of the Refinery, may be held liable for engaging in an abnormally dangerous activity on a theory of supplier liability as permitted by Restatement (Second) of Torts § 389. See Henry, Mem. Aug. 10, 2007, at 27-28.

Counts II, III, and IV of the Complaint allege that defendants are liable on various theories of nuisance. We have already granted summary judgment in favor of Glencore on these claims based on the finding that it did not participate in the creation of and had no opportunity or authority to abate the alleged nuisance. See Henry, Mem. Aug. 10, 2007, at 28-30. The following discussion thus pertains solely to the viability of plaintiffs' nuisance-based claims against defendants SCA and Alcoa.

Count II alleges that defendants are liable for "nuisance per se" because certain conduct on their part violated Virgin Islands law. The Restatement (Second) of Torts, which the Virgin Islands has adopted in the absence of any contrary territorial law, see 1 V.I.C. § 4, does not recognize "nuisance per se" as a cause of action independent from public or private nuisance. The term simply refers, in a generic sense, to "harmful conduct of a kind that always results in liability," Restatement (Second) of Torts, § 821A, cmt. b(3). Consequently, we will grant summary judgment in favor of defendants SCA and Alcoa on Count II of the Complaint.⁶

Count III states a claim for public nuisance, which is "an unreasonable interference with a right common to the general

6. We are aware, of course, that the question of "whether the conduct is proscribed by a statute, ordinance, or administrative regulation" is a factor to be considered in determining whether a defendant's conduct constitutes a public nuisance under Restatement (Second) of Torts § 821B(2).

public." Id. § 821B(1). To decide whether a given interference is unreasonable, a fact-finder may consider:

- (a) Whether the conduct involves a significant interference with the public health, the public safety, the public peace, the public comfort or the public convenience, or
- (b) whether the conduct is proscribed by a statute, ordinance or administrative regulation, or
- (c) whether the conduct is of a continuing nature or has produced a permanent or long-lasting effect, and, as the actor knows or has reason to know, has a significant effect upon the public right.

Id. § 821B(2). The record before us contains "findings of fact" made by the DPNR that defendants Alcoa and SCA may have violated several Virgin Islands environmental regulations based on the consequences of their bauxite storage procedures. Evidence also exists that the conduct of defendants SCA and Alcoa implicates subsections (a) and (c). As a result, plaintiffs have clearly raised a genuine issue of material fact on their claim for public nuisance such that defendants are not entitled to judgment as a matter of law. We will therefore deny summary judgment on Count III insofar as plaintiffs seek recovery for property damages. For the same reasons stated with respect to Count I, however, we will grant summary judgment in favor of defendants SCA and Alcoa on Count III to the extent that plaintiffs request compensation for personal injuries.

Count IV states a claim for private nuisance, which is "a nontrespassory invasion of another's interest in the private use and enjoyment of land." Id. § 821D; see In re Tutu Wells

Contamination Litig., 909 F. Supp. 991, 995-96 (D.V.I. 1995).

The cause of action for private nuisance stems from the nature of the interest invaded rather than the means of invasion. Once plaintiffs have established that defendants interfered with the use and enjoyment of their property, they may secure recovery at trial by showing that the invasion occurred in one of a variety of ways. These include proving that the invasion was "intentional and unreasonable" or that it was "unintentional and otherwise actionable under the rules controlling liability for negligent or reckless conduct, or for abnormally dangerous conditions or activities." Restatement (Second) of Torts § 822.

Evidence exists in the record that a release of particulates from the Refinery property interfered with plaintiffs' use and enjoyment of their properties. And as we held above, plaintiffs have raised a genuine question of material fact on their claim for abnormally dangerous activity, which is predicated upon the same theory of causation and same harm. We will deny the motion of defendants SCA and Alcoa for summary judgment on Count IV of the Complaint to the extent that plaintiffs seek recovery for property damages. Consistent with our earlier discussion, plaintiffs may not seek compensation for personal injury at trial on this or any other basis.

We next address Count VIII, in which plaintiffs allege that defendants negligently failed to contain the bauxite and red mud stored on the Refinery premises, particularly in light of St. Croix's location in a hurricane zone. To recover at trial,

plaintiffs must establish the four traditional elements of a negligence claim, namely, the existence of a duty, breach of that duty, causation, and damages. Charleswell v. Chase Manhattan Bank, N.A., 308 F. Supp. 2d 545, 571 (D.V.I. 2004).

Defendants argue that in the absence of expert testimony, plaintiffs are unable to establish the particular standard of care applicable to storage of bauxite and red mud. We agree that plaintiffs require expert testimony to establish that standard of care. See Nat'l Tel. Coop. Ass'n v. Exxon Corp., 38 F. Supp. 2d 1, 9-10 (D.D.C. 1998). Nonetheless, defendants overstate the scope of our Memorandum and Order of Apr. 13, 2009. We did not address the admissibility of the testimony of plaintiff's expert, Dr. Edward Kleppinger, on the standard of care applicable to the storage of bauxite and red mud under the conditions at issue. Although the broad phrasing contained in our Order might be read to exclude the entirety of Dr. Kleppinger's testimony, his testimony is excluded only insofar as it concerned the nature and amount of the substance that in fact escaped the Refinery and reached plaintiffs' homes. See Henry, Mem. Apr. 13, 2009, at 14-16. We find that his conclusions with respect first to the standard of care applicable to the storage of red mud and bauxite, and second to defendants' alleged nonconformance to that standard, satisfy the requirements of Daubert and Rule 702.

Dr. Kleppinger's testimony constitutes permissible evidence as to the standard of care applicable to the storage of

bauxite and red mud. It also raises a genuine issue of material fact as to whether SCA and Alcoa breached that standard of care. And as discussed earlier, considerable evidence exists that fugitive emissions from the Refinery, possibly attributable to defendants' alleged breach of the relevant standard of care, caused plaintiffs' property damage. We will therefore permit plaintiffs to proceed to trial on a theory of negligence for property damage.

Count V states a claim for negligent abatement predicated upon defendants' efforts to remove the reddish dust from properties belonging to plaintiffs. Because neither the Restatement (Second) of Torts nor Virgin Islands law recognizes a specific cause of action entitled "negligent abatement," we interpret it to be a simple negligence claim. Plaintiffs have introduced evidence that defendants may have failed to exercise due care in their clean-up efforts and thereby caused harm to plaintiffs' personal and real property. Therefore, we will deny the motion of defendants for summary judgment on this claim.

In Count VI, plaintiffs seek recovery for intentional infliction of emotional distress. That tort lies only where "the conduct has been so outrageous in character, and so extreme in degree, as to go beyond all possible bounds to decency" Restatement (Second) of Torts § 46, cmt. d; Heywood v. Cruzan Motors, Inc., 792 F.2d 367, 371-72 (3d Cir. 1986). Plaintiffs have introduced no evidence that defendants' conduct rises to

that level. Accordingly, we will grant summary judgment in favor of defendants on Count VI of the Complaint.

Count VII contains a claim for negligent infliction of emotional distress. Under Virgin Islands law, plaintiffs must establish that defendants' negligent conduct placed them in danger and that they suffered substantial physical harm to their persons as a result. Restatement (Second) of Torts §§ 313, 436A; see Int'l Islamic Cmty. of Masjid Baytulkhalig, Inc. v. United States, 981 F. Supp. 352, 370 (D.V.I. 1997). Here, plaintiffs have failed to introduce evidence of such physical harm occasioned by defendants' conduct. Consequently, we will grant summary judgment in favor of defendants on Count VII.

Finally, in Count IX of the Complaint, plaintiffs seek punitive damages. To recover such damages at trial, they must prove that defendants acted with "bad motive or wanton indifference" to the rights of others and that defendants' conduct was outrageous. Restatement (Second) of Torts § 908, cmt. d; Creque v. Cintron, 17 V.I. 69, 75 (V.I. Super. Ct. 1980). We see no evidence in plaintiffs' submissions of bad motive, wanton indifference, or outrageous conduct on defendants' part. The record will not support a jury award of punitive damages. We conclude that defendants are entitled to summary judgment on Count IX.